

HERMAN, WLADYSŁAW.

Przydomowy chow nutrii. Wyd. 2. popr. i uzup. Warszawa, Państwowe Wydawn.

Rolnicze i Leśne, 1955. 62 p.

(Home-raising of nutria. 2d rev. and enl. ed.)

DA

Not in DLC

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 6, June 1957, Uncl.

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618010016-8

HERMAN, W.

"Poradnik chowu królików" (Rabbit breeding), by W. Herman. Reported in  
New Books (Nowe Ksiazki), No. 13, July 1, 1955

FBI

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618010016-8"

STARZEWSKI, Wojciech; CHRUSCIEL, Tadeusz; WAWRYK, Roman; SAMOCHOWIEC,  
Eugeniusz; HERMAN, Zbigniew

Studies on proteins, lipoproteins and glycoproteins in the blood  
serum of pregnant women with the aid of paper electrophoresis.  
Gin.polska 31 no.1:91-103 Ja-F '60.

1. Z I Kliniki Poloznictwa i Chorob Kobiecyh Slaskiej A.M. w  
Zabru. Kierownik: prof.dr med. W. Starzewski i z Zakladu Farma-  
kologii Slaskiej A.M. w Zabru-Rokitnicy. Kierownik: doc.dr med.  
T. Chrusciel.

(PREGNANCY blood)

(BLOOD PROTEINS in pregn.)

(LIPOPROTEINS blood)

(GLYCOPROTEINS blood)

HERMAN, Zbigniew

A study of some psychotropic drugs with the Barn-Hobbs test. Arch.  
immun.ter.dosw. 9 no.3:543-549 '61.

1. Department of Pharmacology, Silesian School of Medicine, Zabrze-  
Rokitnica.

(PSYCHOPHARMACOLOGY)

WINNICKI, Stefan; HERMAN, Zbigniew

An unusual case of diffuse calcifications of the spleen, liver, pancreas  
and pancreatic region. Polski przegl. radiol. 25 no.2:189-194 '61.

l. Z Prac. Radiologicznej Szp. Miejskiego Nr 1 w Warszawie Kierownik:  
dr med. W. Badzinska Z II Oddz "H" Chorob Wewn Szp. Miejskiego Nr 1  
w Warszawie Kierownik: lek. B. Kleczkowski.

(SPLEEN radiog) (LIVER radiog) (PANCREAS radiog)  
(CALCIFICATION radiog)

NOWOSIELSKA-DERUSOWA, Ewa; HERMAN, Zbigniew; GIBINSKI, Kornel

Studies on the ulcerogenic mechanisms of the effect of corticosteroids.  
Pol. tyg. lek. 22 no.23:906-910 4 Je '62.

1. Z III Kliniki Chorob Wewnętrznych Sz. AM w Bytomiu; kierownik: prof.  
dr med. Kornel Gibinski.  
(ADRENAL CORTEX HORMONES toxicol) (PEPTIC ULCER exper)

CHRUSCIEL, Tadeusz Lesław; KIFINROK, Zdzisław, BIRGIN, Krzysztof, JANIEC, Waldemar; BRUS, Ryszard

The effect of certain chrenotropic compounds on the development of experimental atherosclerosis. Acta physiol. Pol. 15 no.2: 257-268 Mr-Ap '64.

I. W Zakładu Farmakologii Sz. Akademii Medycznej w Szczecinie (Kierownik: doc. dr T. Chrusciel).

HERMAN, Zbigniew; RUGOZ, Jerzy

Effect of niamide on the blood level of 5-hydroxytryptamine  
and on the urinary excretion of 5-hydroxyindolacetic acid in  
patients with malignant carcinoid syndrome. Pol. arch. med.  
wewnet. 34 no.10:1317-1322 '64

1. Z Zakladu Farmakologii Slaskiej Akademii Medycznej w  
Zabruszu (Kierownik: doc. dr. med. T. Chrusciel) oraz z I  
Kliniki Chorob Wewnętrznych Slaskiej Akademii Medycznej w  
Katowicach (Kierownik: prof. dr. med. J. Japa).

88198

Z/038/60/000/010/004/006  
A201/A025

26.2312

AUTHORS:

Čermák, Vladimír; Herman, Zděnek

CS<sub>2</sub>

TITLE:

PERIODICAL:

Jaderna energie, 1960, No. 10, p. 347

TEXT:

In an attempt to formulate equations for the calculation of the true cross-section of extremely rapid reactions in gaseous phase, the authors studied such reactions in inorganic gases. V.L. Talroze (Ref. 1, 3) and D.P. Stevenson (Ref. 2, 4) have already shown that these reactions belong to the elementary reactions provoked in the gaseous phase by ionizing radiation. The elementary reactions are shown in Table 1. Reaction cross-sections, as calculated from the experiments using a Nier-type mass spectrometer. The results of these experiments are shown in Table 1.

$$Q_f = \frac{i_s}{i_p} (n l)^{-1} \quad (1)$$

where  $i_s$  - the current of secondary ions,  $i_p$  - the current of all primary molecular ions,  $n$  - the number of molecules in 1 cm<sup>3</sup>,  $l$  - the path of primary ions in the ionization space, and  $Q_f$  - the ion source, 1 - the path of primary ions in the ionization space, and  $Q_f$  - the phenomenological reaction cross-

- 1 / 6

88198

Z/038/60/000/010/004/006  
A201/A026

Reactions of Ions With Molecules in N<sub>2</sub>, O<sub>2</sub>, CO, SO<sub>2</sub>, CO<sub>2</sub>, COS, and CS<sub>2</sub>

-section, were found to be 2-6 orders of magnitude smaller than the cross-sections of any other known reactions. In addition, the first ionization potentials (i.e. the lowest electron energy at which the corresponding positive ions appear in the mass spectrum) for N<sub>3</sub><sup>+</sup>, O<sub>3</sub><sup>+</sup>, C<sub>2</sub>O<sup>+</sup>, CS<sub>2</sub><sup>+</sup>, and C<sub>2</sub>O<sub>3</sub><sup>+</sup> ions were found to be higher than the first ionization potentials for the primary molecular ions in the ground state. In N<sub>3</sub><sup>+</sup> and C<sub>2</sub>O<sup>+</sup> they corresponded to the first ionization potentials of N<sub>2</sub><sup>+</sup> and CO<sup>+</sup>. ions, respectively, in the B<sub>2</sub>Z<sup>+</sup> state; in the O<sub>3</sub><sup>+</sup> ion to that of the O<sub>2</sub>A<sup>2</sup>X molecule, respectively, in the CS<sub>2</sub><sup>+</sup> ion to that of the O<sub>2</sub>A<sup>2</sup>X molecule, respectively, in the C<sub>2</sub>O<sub>3</sub><sup>+</sup> ion to that of the O<sub>2</sub>A<sup>2</sup>X molecule. These excited states are characterized by a very short lifetime of 10<sup>-7</sup> - 10<sup>-8</sup> sec so that the excited ions become deactivated by radiation while still in the ion source. An attempt was made therefore to formulate equations for the calculation of the true reaction cross-section such as would take into consideration also the deactivation. In such case, the current of secondary ions is not defined by the equation (1), but by the equation

where  $i_{po}$  - the current of reacting excited ions,  $\overline{Q_r}$  - the true reaction cross-section, and  $s$  - the mean path of excited ions during their mean life defined by

Card 2/6

88198  
Z/038/60/000/010/004/006  
A201/A026

Reactions of Ions With Molecules in N<sub>2</sub>, O<sub>2</sub>, CO, SO<sub>2</sub>, CO<sub>2</sub>, COS, and CS<sub>2</sub>

the expression

$$\bar{s} = \frac{1}{4\pi} \int_0^{\pi} s \cdot 2\pi \sin\theta d\theta dt \quad (3)$$

Here  $\theta$  is the angle between the direction of the thermal speed of excited ions and the intensity of the electric field in the ionization space,  $\bar{Q}_r$  is then defined as

$$\bar{Q}_r = \frac{i_p}{i_{p_0}} \cdot \frac{1}{s} Q_f = \frac{Q_1}{Q_e} \cdot \frac{1}{s} Q_f \quad (4)$$

where  $Q_e$  - the excitation cross-section for the electronically excited reactive state, and  $Q_1$  - the ionization cross-section of molecular ions. (In case of the reaction in N<sub>2</sub> a value

$$Q_r \frac{Q_e}{Q_1} = 8.5 \cdot 10^{-16} \text{ cm}^2$$

was obtained from experimental data). If the decrease of excited particles is considered according to the equation

$$N_t = N_0 \cdot e^{-\frac{t}{\tau}} \quad (5)$$

Card 3/6

88198

Z/038/60/000/010/004/006

A201/A026

Reactions of Ions With Molecules in N<sub>2</sub>, O<sub>2</sub>, CO, SO<sub>2</sub>, CO<sub>2</sub>, COS, and CS<sub>2</sub>

where  $N_t$  - is the quantity of particles in time  $t$ ,  $N_0$  is the quantity of particles in time  $t=0$ , and  $\tau$  is the mean life of excited particles, then for the product of the mean velocity constant value  $K$  and the ratio  $Q_e/Q_i$  the following expression can be derived:

$$K \frac{Q_e}{Q_i} = \frac{1_s}{i_p \cdot n \cdot \tau \left( 1 - e^{-\frac{t_r}{\tau}} \right)},$$

where  $t_r$  - the time of the order of  $10^{-6}$  sec during which ions remain in the source. In experimental conditions given for the reaction of the formation of a N<sub>3</sub><sup>+</sup> ion, this product has a value of  $1.5 \cdot 10^{-9} \text{ cm}^3 (\text{molecule} \cdot \text{sec})^{-1}$ . When calculating the heat in reactions of ions with molecules in nitrogen and oxygen from the combination heat of the reacting substances, it is seen that the reactions with ions in the ground state are endothermic. They become exothermic only when ions in electronically excited state are involved. Thus, in case of reactions of ions with molecules proceeding without activation energy, the electronic excitation can be used to make up for the energy deficit. There are 1 table and 6 references; 2 Czechoslovak, 2 Soviet and 2 English.

Card 4/6

Z/038/60/000/010/004/006  
A201/A026

Reactions of Ions With Molecules in N<sub>2</sub>, O<sub>2</sub>, CO, SO<sub>2</sub>, CO<sub>2</sub>, COS, and CS<sub>2</sub>

ASSOCIATION: Ústav fyzikální chemie Československé akademie věd (Institute of Physical Chemistry, Czechoslovak Academy of Sciences) in Prague

Card 5/6

88198

Z/038/60/000/010/004/006  
A201/A026

Reactions of Ions With Molecules in N<sub>2</sub>, O<sub>2</sub>, CO, SO<sub>2</sub>, CO<sub>2</sub>, COS, and CS<sub>2</sub>

Phenomenological cross-sections of secondary reactions

Gas mixture	Ion Type	Reaction	$\sigma_f \cdot 10^{16} \text{ cm}^2$
Ar + H <sub>2</sub>	ArH <sup>+</sup>	Ar <sup>+</sup> + H <sub>2</sub> = ArH <sup>+</sup> + H	110
N <sub>2</sub>	N <sub>3</sub> <sup>+</sup>	N <sub>2</sub> <sup>+</sup> + N <sub>2</sub> = N <sub>3</sub> <sup>+</sup> + N	0.2
O <sub>2</sub>	O <sub>3</sub> <sup>+</sup>	O <sub>2</sub> <sup>+</sup> + O <sub>2</sub> = O <sub>3</sub> <sup>+</sup> + O	1.2
CO	C <sub>2</sub> O <sup>+</sup>	CO <sup>+</sup> + CO = C <sub>2</sub> O <sup>+</sup> + O	0.1
N <sub>2</sub> + CO	NCO <sup>+</sup>	N <sub>2</sub> <sup>+</sup> + CO = NCO <sup>+</sup> + N	0.1
		CO <sup>+</sup> + N <sub>2</sub> = NCO <sup>+</sup> + N	0.1
SO <sub>2</sub>	S <sub>2</sub> O <sub>3</sub> <sup>+</sup>	SO <sub>2</sub> <sup>+</sup> + SO <sub>2</sub> = S <sub>2</sub> O <sub>3</sub> <sup>+</sup> + O	0.05
CO <sub>2</sub>	CO <sub>3</sub> <sup>+</sup>	CO <sub>2</sub> <sup>+</sup> + CO <sub>2</sub> = CO <sub>3</sub> <sup>+</sup> + CO	0.003
	C <sub>2</sub> O <sub>3</sub> <sup>+</sup>	= C <sub>2</sub> O <sub>3</sub> <sup>+</sup> + O	0.03
COS	C <sub>2</sub> O <sub>2</sub> <sup>+</sup>	= C <sub>2</sub> O <sub>2</sub> <sup>+</sup> + 2O(O <sub>2</sub> )	0.006
	CS <sub>2</sub> O <sup>+</sup>	COS <sup>+</sup> + COS = CS <sub>2</sub> O <sup>+</sup> + CO	0.1
CS <sub>2</sub>	CS <sub>3</sub> <sup>+</sup>	CS <sub>2</sub> <sup>+</sup> + CS <sub>2</sub> = CS <sub>3</sub> <sup>+</sup> + CS	4.0
	C <sub>2</sub> S <sub>3</sub> <sup>+</sup>	= C <sub>2</sub> S <sub>3</sub> <sup>+</sup> + S	0.1
C <sub>2</sub> S <sub>2</sub> <sup>+</sup>	C <sub>2</sub> S <sub>2</sub> <sup>+</sup>	= C <sub>2</sub> S <sub>2</sub> <sup>+</sup> + 2S	0.6
	C <sub>2</sub> S <sup>+</sup>	= C <sub>2</sub> S <sup>+</sup> + 3S	0.2

Card 6/6

HERMAN 2

✓ Charge-transfer reactions in the ionic source of the  
mass spectrometer. M. V. Čermák and Z. Herman (Ústav  
fyzikální chemie ČSAV, Prague). Collection Czechoslov.

Chem. Commun., 23, 1210-13 (1960).—Peaks are described  
which appear in the mass spectra of some substances (rare  
gases, N<sub>2</sub>, CO, CO<sub>2</sub>) at higher pressure in the source; the  
positions of the peaks depend on the value of the extraction  
potential. The peaks are ascribed to ions which are formed  
in known parts of the ionic source as a result of the charge-  
transfer reactions.

5

HERMAN, Z.

Radiometric determination of small quantities of silver, bismuth  
and magnesium. Coll Cz Chem 26 no.8:1925-1930 '61.

1. Institut fur physikalische Chemie, Karlsuniversitat, Prag;  
Jetzige Adresse: Institut fur physikalische Chemie, Tschechoslowak-  
ische Akademie der Wissenschaften, Prag.

CERMAK, V.; HERMAN, Z.

Application of the mass spectrometer in the study of dissociative charge transfer reactions of polyatomic molecules. Coll Cz Chem 27 no.2:406-410 F '62.

1. Institute of Physical Chemistry, Czechoslovak Academy of Sciences, Prague.

S/058/63/000/002/020/070  
A062/A101

AUTHORS: Cermák, V., Herman, Z.

TITLE: On the existence of the excited state  $A^4\sum$  of  $N_2^+$  ions.

PERIODICAL: Referativnyy zhurnal, Fizika, no. 2, 1963, 22, abstract 2D122  
("Collect. Czechosl. Chem. Comms", 1962, v. 27, no. 6, 1493 - 1496.  
English; summary in Russian)

TEXT: The dependence of ion currents of primary and secondary ions of  $N_2^+$  and  $N_3^+$  as well as of  $N_2$  and  $ArN$  on the energy of ionizing electrons were investigated. Secondary ions of  $N_3$  or  $ArN$  are formed in ion-molecular reactions in  $N_2$  (or in the mixture of Ar and  $N_2$ ), occurring in the ion source of a mass spectrometer. It is shown that the dependence of the currents of the investigated secondary ions on the energy of the electrons has a maximum which is characteristic of the transitions between levels of different multiplicities. It is assumed that such a dependence is due to the fact that in the ion-molecular reactions  $N_2^+$  ions participate in the  $^4\sum_u$ .

Ye. Frankevich

[Abstracter's note: Complete translation]

Card 1/1

CERMAK, V.; HANUS, V.; HLADEK, L.; HERMAN, Z.; PACAK, M.; SCHULZ, L.

A mass spectrometer for precise determination of the ratio of deuterium to hydrogen in hydrogen gas in the region of natural deuterium concentrations. Coll Cz Chem 27 no.7:1633-1638 Jl '62.

1. Institute of Physical chemistry, Czechoslovak Academy of Sciences, Prague.

HERMAN, Z; ČERMÁK, V.

Czechoslovakia

Institute of Physical Chemistry, Czechoslovak Academy of  
Science,-Prague - (for all)

Prague, Collection of Czechoslovak Chemical Communications,  
No 4, 1963, pp 799-807

"Reactions of Ions and Excited Neutral Particles."

2

VERMAK, V.; HERMAN, L.

The mass spectrometric detection of highly excited long-lived states of noble gas atoms. Coll Cs Chem 29 no.4: 953-959 Ap '64.

1. Institute of Physical Chemistry, Czechoslovak Academy of Sciences, Prague.

PILINKA, K.; HANES, M.

Exchange reactions of carbon dioxide and carbon monoxide with  
nickel oxides. Coll. Czech. Chem. 29 no. 11, 2956-2958 (1964).

1. Institute of Physical Chemistry, Czechoslovak Academy of  
Sciences, Prague.

CERMAK, V.; HERMAN, Z.

Ionizing reactions of noble gas atoms in metastable states  
with polyatomic molecules. Coll Cz Chem 30 no.1:169-194  
Ja '65.

1. Institute of Physical Chemistry of the Czechoslovak  
Academy of Sciences, Prague. Submitted May 4, 1964.

CERMAK, V.; HERMAN, Z.

Mass spectrometric study of the formation of  $N_3^+$  and  $C_2C^+$ .  
Coll Cz Chem 30 no.5:1343-1357 My '65.

1. Institute of Physical Chemistry of the Czechoslovak Academy  
of Sciences, Prague. Submitted July 18, 1964.

CZECHOSLOVAKIA

HERMAN, Z.; CERMAK, V.

Institute of Physical Chemistry, Czechoslovak Academy of Sciences, Prague  
(for both)

Prague, Collection of Czechoslovak Chemical Communications, No 2, Feb 1966,  
pp 649-658

"Associative ionization in mixtures of carbon monoxide with sodium and potassium and the mechanism of associative ionization reactions."

ACC NR: AP6017903

(1)

SOURCE CODE: CZ/0078/65/000/012/0021/0021

INVENTOR: Herman, Zdenek

ORG: none

TITLE: (A combustion forechamber for a combustion engine) CZ Pat. No. 1562-65

SOURCE: Vynalezy, no. 12, 1965, 21

TOPIC TAGS: combustion chamber, combustion engineering, internal combustion engine, internal combustion engine component

ABSTRACT: A combustion forechamber for an internal combustion engine is described which is formed essentially by the outside surface of a ring of circular cross section or a torus fitted to the main cylinder coaxially with the cylinder and the multi-orifice injection nozzle whose fan of fuel jets lie in a plane perpendicular to its longitudinal axis. The distinguishing feature of the forechamber is that the external band of the torus surface changes into an annular band slowly increasing the height of the combustion space of the forechamber in the direction of its axis where it reaches its greatest height. At the same time and principally in the region where the annular band broadens is practiced a groove projecting radially from the highest

Card 1/2

ACC NR: AP6017903

point of the combustion forechamber approximately in the direction of one fuel jet  
of the injection nozzle.

SUB CODE: 21/ SUBM DATE: 08Mar65

Card 2/2

HERMAN, Zbigniew S.; PETELENZ, Tadeusz

The effect of serotonin on electrocardiographic curves of pigeons.  
Acta physiol. Pol. 15 no.2:269-278 Mr-Ap '64.

1. Z Zakladu Farmakologii Sl. Akademii Medycznej w Zabrzu  
(Kierownik: doc. dr T. Chrusciel) i z Instytutu Medycyny  
Pracy w Przemysle Weglowym i Hutniczym w Zabrzu (Kierownik:  
prof. dr W. Zahorski).

CZECHOSLOVAKIA / POLAND

HERMAN, Z.S.: Department of Pharmacology, Silesian Academy of Medicine, Katowice. [Original version not given].

"Influence of Some Psychotropic Drugs on the Amphetamine Stereotyped Behavior of White Rats."

Prague, Activitas Nervosa Superior, Vol 8. No 4, Nov 66, p423

**Abstract:** An injection of 10/mg/kg of amphetamine sulfate causes a typical automatic behavior ; the reaction lasted an average of 120 minutes in the investigated group of 250 rats. Influence of some psychotropic drugs on the duration of this period was investigated. Chlorpromazine in a dose of 0.5 mg/kg did not have any influence, but 2 mg decreased the period, and 4 mg completely inhibited the stereotype movements. 2.5 mg of Mopazine, 3 mg of Reserpine, 2.5 to 5 mg of tetrabenazine, and 1 mg of chlorprotixen significantly reduced the 120 minute period. Muscle relaxants 0.5 to 1.0 mg of chlordiazepoxide. 2 mg diazepam, 25 mg meprobamate, and 20 mg cyclobarbitalone had no influence on the duration of the period. MAO inhibitors, niamide in a dose of 100 mg and par-glyline 10 mg increased its duration. No references. Submitted at 1/1 the 8th Psychopharmacological Meeting at Jesenik, 18-22 Jan 66.

LIPINSKI, Boleslaw; HERMAN, Zofia

Comparative research on the herbs mixture Nervosan and the  
granulated herbs Nervogran. Farmacja Pol. 19 no.17/18:  
353-354            25 S'63

1. Zaklad Lekow Galenowych, Instytut Lekow, Warszawa.  
Kierownik: dr. H. Ludwicki.

\*

LUDWICKI, Henryk, dr; HERMAN, Zofia

Studies on the evaluation of pharmaceutical forms. Pt. 2.  
Farmacja Pol 20 no. 8:289-291 25 Ap '64.

1. Department of Galenic Drugs, Drug Institute, Warsaw.  
Head: dr H.Ludwicki.

LIPINSKI, Boleslaw; HERMAN, Zofia; LUDWICKI, Henryk, dr;  
DUDZIK, Zygmunt

Studies on the durability of certain pharmacopoeial  
alkaloidal raw materials. Farmacja Pol 20 no. 11/12:  
393-397 25 Je '64.

1. Department of Galenic Drugs, Institute of Drugs,  
Warsaw. Head: dr. H. Ludwicki.

CEPEK,Z.; HERMANEK,J.

Importance of the transverse fascia in surgery of inguinal hernia. Rozh. chir. 43 no.1:12-16 Ja'64.

1. Chirurgicke oddeleni OUNZ v Jindrichove Hradci; vedouci:  
MUDr. Z.Cepek.

*HERMANEK, S.*

CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry. G-2

Abs Jour: Referat Zhur-Khimiya, No 4, 1958, 11332.

Author : Hermanek, S., and Trojanek, J.

Inst

Title : Synthesis of Trans- $\Delta$  6,7-Octahydroisoquinoline

Orig Pub: Chem Listy, 51, No 3, 539-542 (1957) (in Czech). *AKTUALNÉ A SLOVENSKÉ ČASOPISY*, SLOVENSKÉ KOMUNISTICKÉ RÁDYO (TRANSLATIONS OF CZECH CHEMICAL COMMUNICATIONS), VOL. 22, NO. 4, P. 1157, Aug 1957, PEŠKOV, CZECHOSLOVAKIA.

Abstract: 350 gms of the Na salt of the ethyl ester of dicarbethoxy-glutaconic acid (I-ester) are shaken 20 hrs with 350 ml conc HCl and 1.5 liter water; the 272 gms of I which are obtained are refluxed 3-5 hrs with 300 ml water, 300 ml alcohol, and 600 ml conc HCl; the solution is evaporated to dryness, the water is removed by aceotropic distillation, and the acid is esterified by heating (10 hrs,  $\sim 100^\circ$ ) with 300 ml CH<sub>3</sub>OH and 7 ml H<sub>2</sub>SO<sub>4</sub> in 700 ml dichloroethane: the methyl ester of glutaconic acid (II) is obtained,

Card : 1/4

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000618010016-8  
CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry. G-2

Abs Jour: Referat Zhur-Khimiya, No 4, 1958, 11332.

yield 58%, bp 104-107°/8mm. 200 ml butadiene, 100 gms I, and 0.25 gm picric acid are heated for 5 hrs at 140-150° (40 atm); distillation of the reaction mixture gives the dimethyl ester of trans- $\Delta$  4,5-tetrahydrohomophthalic acid (III-acid), yield 33%, bp 103°/0.4 mm, n<sup>20</sup>D 1.4696. When 66.5 gms of the ester of III are refluxed for 2 hrs with 500 ml 10% NaOH III is obtained, yield 44.8 gms, mp 154-155° (from water); III is formed in quantitative yields when the anhydride (IV) or the imide (V) is refluxed with 10% NaOH. The heating of 4 gms III with 40 ml C<sub>6</sub>H<sub>6</sub> and 12 gms CH<sub>3</sub>COCl (2 hrs) gives IV, yield 97%, mp 167-168° (from benzene). A solution of 3.25 gms IV in 35 ml 28% aqueous NH<sub>3</sub> is heated (45 min,  $\sim 100^\circ$ ), the resulting amino acid is isolated, dried, and refluxed 2 hrs with 60 ml C<sub>6</sub>H<sub>6</sub> and 15 ml (CH<sub>3</sub>CO)<sub>2</sub>O; 1.8 gms V are obtained,

Card : 2/4

2.8

CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry. G-2

Abs Jour: Referat Zhur-Khimiya, No 4, 1958, 11332.

mp 236-238° (decomp; from alcohol). The hydrogenation of the ester of III in abs CH<sub>3</sub>OH over 5% Pd/Al<sub>2</sub>O<sub>3</sub> gives the dimethyl ester of trans-hexahydrohomophthalic acid (VI-acid), yield 91.5%, bp 98-99°/0.8 mm. VI (NaOH solution) is obtained in yields of 73.2%, mp 160-162° (from water). Similarly V gives the imide of VI in quantitative yields, mp 187-188° (from CH<sub>3</sub>OH). The reduction of V by refluxing for 25 hrs with a large excess of LiAlH<sub>4</sub> in tetrahydrofuran gives trans- $\Delta^{6,7}$ -octahydroisoquinoline (as the picrate), mp 161.5-162.5° (from water), and a base (VII), bp 91-92°/11mm, n<sup>20</sup>D 1.5031. The hydrogenation of the hydrochloride of VII in water over 5% Pd/Al<sub>2</sub>O<sub>3</sub> gives trans-decahydroisoquinoline (isolated as the picrate), mp 176.5-177.5° (corrected; from CH<sub>3</sub>OH);

Card : 3/4

CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry. G-2

Abs Jour: Referat Zhur-Kemiya, No 4, 1958, 11332.

the latter product is also obtained by the reduction  
of the imide of VI by LiAlH<sub>4</sub> in ether (30 hrs).

Card : 4/4

27

CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry. G-2

Abs Jour: Ref Zhur-Khim , No 24, 1958, 81580

Author : Hermanek S., Stanek J.

Inst :

Title : A New Method for Obtaining Homoiso vaniline.

Orig Pub: Chem. listy, 1958, 52, № 2, 355-56

Abstract: Homoiso vaniline (II) was synthesized by the ozonolysis of  $4-C_6H_5CH_2-3-CH_2OC_6H_5CH_2CH_2=CH_2$  (I) followed by the hydrogenation of the ozonide formed, and the simultaneous hydrolysis of the  $C_6H_5CH_2O$  group. In the same way homoveratrone aldehyde (III) was obtained from the methyl ester of eugenole. The solution of I (15 grams) in ethylacetate (200 ml) was purged with  $O_2$  containing 3% of  $O_3$  (for 6 hours with cooling), afterwards it was hydrogenated for 3 hours on 5%

Card : 1/3

CZECHOSLOVAKIA/Organic Chemistry. Synthetic Organic Chemistry. G-2

Abs Jour: Ref Zhur-Khim., No 24, 1958, 81580.

PdAl<sub>2</sub>O<sub>3</sub>; (3 grams) at standard temperature and pressure, was further hydrogenated in acetic acid with the addition of the same catalyst and was distilled under vacuum; 49% II was obtained, b.p. 117-122°C./0.2mm; semicarbazone, m.p. 182°C. With the same ozonolysis, hydrogenation of the ozonide and a distillation under vacuum, 51% of III was synthesized, b.p. 118-123°C./0.3 mm.; semicarbazone m. p. 162-163°C. The reaction with 2% of HCl in absolute methanol (32 grams) at room temperature for two days resulted, after the usual separation and distillation under vacuum, in the formation of the dimethyl acetal of the aldehyde of III, yield 49%, b.p. 112-116°C./0.3 mm., which was partially not

Card : 2/3

Country : Czechoslovakia G-2  
Category : Organic Chemistry .. Synthetic Organic Chemistry  
Abs. Jour. : Ref. Zhur.-Khimika No. 6, 1959 19347  
Author : Lukes, R.; Hermankova, V.; Hermanek, S.  
Institut. :  
Title : Alkylation of Ethyl Ester of Methylene-Bis-Malonic Acid.  
Orig. Pub. : Chem. listy, 1958, 52, No 4, 682-687

Abstract : Alkylation of methylene-bis-malonic ester (I) with alkyl iodides RI in alcohol solution of  $\text{NaOC}_2\text{H}_5$  (see Dressel O., Liebigs Ann. Chem., 1890, 256, 187) results in the case of the lower RI in good yields of dialkylmethylenbis-malonic esters (II, alkyl = R), but with increase of R the yield of II drops sharply and there are formed as by-products ethyl ester of monoalkyl-malonic acid, ethyl ester of methylene-malonic acid (III) and its condensation products. Evidently, there takes place cleavage of the primarily formed monoalkylmethylenbis-malonic esters (IV, alkyl = R) since IV, R =  $\text{C}_2\text{H}_5$ , on boiling with alcohol solution of  $\text{NaCC}_2\text{H}_5$  decomposes to  $\text{C}_2\text{H}_5\text{CH}(\text{COOC}_2\text{H}_5)_2$ , malonic ester, and

Card: 1/4

Country :	Czechoslovakia	G-2
Category :		
Abs. Jour. :		19347
Author :		
Institut. :		
Title :		
Orig Pub. :		

Abstract : III (isolated as fraction of polymers), while II, R = C<sub>2</sub>H<sub>5</sub>, under the same conditions, remains unchanged. IV were obtained by alkylation of Na-salt of ethyl ester of  $\alpha, \alpha'$ -dicarbethoxy-glutaconic acid (VI, alkyl = R). To 65.7 g Na in 1 liter absolute alcohol added within 20 minutes 192 g CH<sub>2</sub>(COOC<sub>2</sub>H<sub>5</sub>)<sub>2</sub>, boiled 15 minutes and rapidly added 97.5 g CHCl<sub>3</sub>. On completion of vigorous reaction, mixture is boiled 30 minutes, filtered hot and filtrate kept 12 hours at - 20°; yield of V 62%. 0.1 mole V and 0.1 mole RI boiled in 50 ml alcohol, alcohol driven off, residue diluted with water and extracted with ether to get VI. VI hydrogenated over 5% Pd/Al<sub>2</sub>O<sub>3</sub> in alcohol at 20°/1 atmosphere; yield of IV  
Card: 2/4

Country : Czechoslovakia G-2  
Category :

Abs. Jour. : 19347

Author :

Institut. :

Title :

Orig. Pub. :

Abstract : is quantitative. Listing R, duration of heating in hours, yield of VI in %, BP in °C/mm,  $n^{20}_{D}$ , BP of IV in °C/mm,  $n^{20}_{D}$  : C<sub>2</sub>H<sub>5</sub>, 24, 53, 140-142/0.5, 1.4548, 134.5/0.25, 1.4422; n-C<sub>3</sub>H<sub>7</sub>, 48, 50, 145-147/0.5 (MP 49-50°), - , 139/0.25, 1.4423; n-C<sub>4</sub>H<sub>9</sub>, 64, 30, 147-148/0.25, 1.4547, 139-140/0.2, 1.4433. To boiling solution of 0.1 mole I and RI in 20 ml absolute alcohol added dropwise a solution of 0.2 g-atom Na in 80 ml absolute alcohol maintaining pH of the solution < 8.5. After addition of all NaOC<sub>2</sub>H<sub>5</sub>, the mixture is boiled for 30 minutes, alcohol is driven off, residue diluted with water and II extracted with ether. Listing R, amount of

Card: 3/4

Country : Czechoslovakia  
 Category : Organic Chemistry. Synthetic Organic Chemistry G-2  
 Abs. Jour. : Ref. Zhur.-Khimiya No. 6, 1959  
 Author : 19347  
 Institut. :  
 Title :  
 Orig Pub. :  
 Abstract : RI in moles, duration of reaction in hours,  
 yield of II in %, BP in °C/mm, n<sub>20</sub>D: C<sub>2</sub>H<sub>5</sub>, 0.25, 2, 90, 134-  
 135/0.4 (MP 61-62°), - ; n-C<sub>3</sub>H<sub>7</sub>, 0.25, 3, 60, 146-147/0.3  
 (MP 42-43°), 1.4499; n-C<sub>4</sub>H<sub>9</sub>, 0.4 (C<sub>4</sub>H<sub>9</sub>Br), 10, 60, 149/0.2,  
 1.4513; n-C<sub>6</sub>H<sub>13</sub>, 0.4 (C<sub>6</sub>H<sub>13</sub>Br), 1.8, 45, 168-171/0.2, 1.4530.  
 In the same manner by alkylation of 0.1 mole IV, R = n-C<sub>4</sub>H<sub>9</sub>,  
 with 0.25 mole C<sub>2</sub>H<sub>5</sub>I (2 hours) were obtained 72% C<sub>2</sub>H<sub>5</sub>C(COO-  
 C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>CH<sub>2</sub>C(COOC<sub>2</sub>H<sub>5</sub>)<sub>2</sub>C<sub>4</sub>H<sub>9</sub>, BP 135-137/0.2 mm, n<sub>20</sub>D 1.4516.  
 -- J. Plesek.

Card: 4/4

COUNTRY : CZECHOSLOVAKIA  
 CATEGORY : Organic Chemistry. Synthetic  
**APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000618010016-8"**  
 ABS. JOUR. : RZhKhim., No. 23 1959, No. 82249  
 AUTHOR : Hermanek, S.; Stanek, J.  
 INST. :  
 TITLE : A New Method of Synthesis of Nonoisovernillin  
 ORIG. PUB. : Collect. Czechosl. Chem. Commun., 1959, 24,  
 No 4, 1366-1368  
 ABSTRACT : No abstract.  
 See RZhKhim., 1958, No 24, No 81580

CARD:

1/1

Z/008/60/000/09/002/002  
E142/E535

AUTHORS: Hermanek, Stanislav and Schwarz, Vladimir

TITLE: Hydroboration and its Use for Syntheses in Organic Chemistry

PERIODICAL: Chemické listy, 1960, No. 9, pp. 994-1014

TEXT: This review article covers work published on the hydroboration reaction, i.e. the reaction of diboranes with unsaturated organic compounds (olefins, acetylenes) when tri- or dioalkyl boranes are formed, up to January 1, 1960 which were accessible to the authors. This reaction was first described by Hurd (Ref.30) who obtained triethylborane on reacting diborane with ethylene. The mechanism of the reaction is described as well as side reactions which occur when diborane is reacted with alcohol, ethers, amines or carbonyl compounds. Trialkyl boranes are increasingly used as polymerization catalysts and rocket fuels. Dialkyl and tetraalkyl diboranes (Ref.1) can be obtained on distilling trialkyl boranes. Alkyl boranes can further be used for the preparation of cisolefins (Ref.13) and for the preparation of alcohols and ketones. The reaction of

Card 1/2

Z/008/60/000/09/002/002  
E142/E535

Hydroboration and its Use for Syntheses in Organic Chemistry ✓  
triethyl borane with mercury compounds is also mentioned (Ref.29).  
After describing the preparation (Table 3) and properties of diborane, the authors quote some examples on the use of the hydroboration reaction, e.g. the determination of diborane, of exo-norborneol, of 5 $\alpha$ -cholestane-3 $\beta$ , 6 $\alpha$ -diol, 3 $\beta$ -dimethylaminoconanine-6, n-hexane, cis-3-hexene, n-hexaldehyde, tri-n-decylborane, tri-n-hexylborane and p-nitrobenzyl alcohol. A table lists compounds which have been subjected to hydroboration and also gives percentage yields of the end product, reaction conditions and the relevant literature references. There are 4 tables and 60 references: 2 Soviet, 3 German, 2 French and 53 English.

ASSOCIATION: Výzkumný ústav léčivých rostlin, Praha  
(Research Institute for Natural Pharmaceuticals,  
Prague)

SUBMITTED: February 22, 1960

Card 2/2

PITHA, J.; HERMANEK, S.; VIT, J.

Reduction of carboxylic acid and its derivatives with sodium-aluminum hydride. Coll Cz chem 25 no.3:736-742 Mr '60. (EEAI 9:12)

l. Laboratorium fur heterocyclische Verbindungen, Prag, Forschungs-institut fur Heilpflanzen, Prag und Technische Hochschule fur Chemie, Prag.

(Carboxylic acids)  
(Aluminum sodium hydride)

HERMANEK, S.; SYKORA, K.

Steroid derivatives. IV. Splitting 16-acyloxypregnanone-20-one with sodium hydride. Coll Cs chem 25 no.3:743-747 Mr '60. (EAI 9:12)

1. Forschungsinstitut fur Heilpflanzen, Prag.

(Steroids)

(Acyl groups)

(Hydroxypregnane)

(Sodium hydride)

AKHREM, A.A.; GERZNAMEK, S. [Hermanek, S.]; SYGORA, K. [Syhora, K.]

New case of the closure of the  $5\alpha$ ,  $6\alpha$ -oxide ring in the androstane series.. Izv. AN SSSR Otd. khim. nauk no.10:1898-1899 O '60.  
(MIRA 13:10)

1. Institut organicheskoy khimii im. N.D. Zelinskogo Akademii nauk  
SSSR i Nauchno-issledovatel'skiy institut prirodnnykh lekarstvennykh  
veshchestv, Praga.  
(Androstane) (Cyclization)

HERMANEK, S.; SCHWARZ, V.; CEKAN, Z.

Steroid derivatives. XIII. Chromatography of neutral steroids on a thin aluminum-oxide layer. Coll Cs chem 26 no. 6: 1669-1679 Je '61.

1. Forschungsinstitut fur naturliche Heilmittel, Prag.

(Steroids) (Chromatography)

CHAKA, V.; HERMANN, I.

Liposid derivatives. -r. 32. Coll Czech Rep. no. 194360-2368  
0 '64.

1. Research Institute of Natural Drugs, Prague; and Nuclear  
Research Institute, Czechoslovak Academy of Sciences, Rez near  
Prague.

PELC, B.; HERMANEK, S.; HOLOUBEK, J.

Steroids. Part 13: Dehydrobromination of 2,4-dibrom-3-keto-5 $\beta$ -androstan-derivates in dimethyl in dimethylformamide. Coll Cs Chem 26 no.7:1852-1861 J1 '61.

1. Forschungsinstitut fur Natur-Arzneimittel, Prag.

(Bromination) (Formamide)

HERMANEK, S.; SCHWARZ, V.; CEKAN, Z.

Methods of separation of natural products. Part 3: Measurement  
of activity of alumina by means of thin layer chromatography.  
Coll Cz Chem 26 no.12:3170-3173 D '61.

1. Research Institute for Natural Drugs, Prague.

ANDROVIC, A.; SKODACEK, P.; GOTFRYD, O.; LEJDAR, Z.; ZEMAN, J.; HERMANEK, S.;  
JANCEKOVA, G.

Discussion on the interlaminar solution of laminal syndromes and the  
course of re-education. Cas.lek.cesk 100 no.46:1444-1448 17 N '61.

1. Neurolog. a rehabilitac. odd. Cs. st. kupelev Piestany ako aj  
chirurg. klinika v Brne, prednosta prof. dr. Podlaha a VKU Piestany.

(SPINE dis)

PELC, B.; HERMANEK, S.

Steroid derivates. Part 15: Dehydrobromination experiments on the  
6-bromo-7-ketocholane derivates. Coll Cz Chem 27 no.9:2223-2226 S '62.

1. Forschungsinstitut fur Natur-Arzneimittel, Prag.

SCHWARZ, V.; HERMANEK, S.; TROJANEK, J.

Steroid derivatives. Part 20: Effect of 17 $\alpha$ -substituents on the velocity of bromine additions on 3 $\beta$ -acetoxy- $\Delta^5$ -androsten derivatives. Coll Cz Chem 27 no.12:2778-2783 D '62.

1. Forschungsinstitut fur Natur-Arzneimittel, Prag (for Schwarz and Trojanek). 2. Institut fur Kernforschung, Rez bei Prag (for Hermanek).

CZECHOSLOVAKIA

HERMANEK, S; SCHWARZ, V; CEKAN, Z.

Research Institute of Natural Remedies, Prague  
(for all)

Prague, Collection of Czechoslovak Chemical Communications,  
No 8, 1963, pp 2031-2039

"Methods of Separating Natural Materials VII. The  
Relationship between Substance and Solution  
Matter in Chromatography of Aluminiumoxyde."

HERMANEK, S.; SCHWARZ, V.; CEKAN, Z.

Methods for separation of natural substances. Pt. 7. Coll Cz  
Chem 28 no.8:2031-2039 Ag '63.

1. Forschungsinstitut fur Arzneimittel, Prag (for Schwarz and  
Cekan). 2. Institut fur Kernforschung, Tschechoslowakische Aka-  
demie der Wissenschaften, Rez bei Prag (for Hermanek).

CZECHOSLOVAKIA

HERMANEK, S; PLESEK, J

Czechoslovak Academy of Sciences (Tschechoslowakische Akademie der Wissenschaften), Prague - (for both)

Prague, Collection of Czechoslovak Chemical Communications, No 1, January 1966, pp 177-188

"Chemistry of boron hydride. Part 1: Preparation of  $Mg(B_3H_8)_2$ "

CZECHOSLOVAKIA

HERMANEK, S; PLESEK, J; GREGOR, V

Nuclear Research Institute, Czechoslovak Academy of Sciences, Rez near Prague (for all)

Prague, Collection of Czechoslovak Chemical Communications, No 3, March 1966, pp 1281-1287

"Chemistry of Boranes. Part 2: Thin layer chromatography of non-ionic boron compounds."

CZECHOSLOVAKIA

HERMANEK, S; PLESEK, J

Nuclear Research Institute, Czechoslovak Academy of Sciences, Rez near Prague - (for both)

Prague, Collection of Czechoslovak Chemical Communications, No 5, May 1966, pp 1975-1984

"Chemistry of boranes. Part 3: Relationship between structure and chromatographic behaviour of boranes and their addition compounds with Lewis bases."

CZECHOSLOVAKIA

PLESEK, J; HERMANEK, S

Nuclear Research Institute, Czechoslovak Academy of Sciences, Rez near Prague - (for both)

Prague, Collection of Czechoslovak Chemical Communications, No 8, August 1966, pp 3068-3067

"Synthesis and properties of magnesium and aluminum hydride."

CZECHOSLOVAKIA

HERMANEK,S.

PLSHEK, J; STIBER, B; HERMANEK, S

Nuclear Research Institute, Czechoslovak Academy  
of Sciences, Prague-Rez - (for all)

Prague, Collection of Czechoslovak Chemical Communications, No 12, December 1966, pp 4744-4745

"Chemistry of boranes. Part 6; The reaction of bis-dialkylsulphide-dodecahydroadecaboranes with hydrohalogenes. General preparation of 6-(or 5-) halogeno-didecahydroadecaboranes."

Country : Czechoslovakia G-2  
Category : Organic Chemistry - Synthetic Organic Chemistry  
Abs. Jour. : Ref. Zhur.-Khimiy No. 6, 1959 19347  
Author : Lukes, R.; Hermankova, V.; Hermanek, S.  
Institut. : Alkylation of Ethyl Ester of Methylene-Bis-  
Titic : Malonic Acid.  
Orig. Pub. : Chem. listy, 1958, 52, No 4, 682-687

Abstract : Alkylation of methylene-bis-malonic ester (I) with alkyl iodides RI in alcchl solution of  $\text{NaOC}_2\text{H}_5$  (see Dressel O., Liebigs Ann. Chem., 1890, 256, 187) results in the case of the lower RI in good yields of dialkylmethylenbis-malonic esters (II, alkyl = R), but with increase of R the yield of II drops sharply and there are formed as by-products ethyl ester of monoalkyl-malonic acid, ethyl ester of methylene-malonic acid (III) and its condensation products. Evidently, there takes place cleavage of the primarily formed monoalkylmethylen-bis-malonic esters (IV, alkyl = R) since IV, R =  $\text{C}_2\text{H}_5$ , on boiling with alcohol solution of  $\text{NaOC}_2\text{H}_5$  decomposes to  $\text{C}_2\text{H}_5\text{CH}(\text{COOC}_2\text{H}_5)$ , malonic ester, and

Card: 1/4

Country :	Czechoslovakia	G-2
Category :		
Abs. Jour. :		19347
Author :		
Institut. :		
Title :		
Orig. Pub. :		
<p>Abstract : is quantitative. Listing R, duration of heating in hours, yield of VI in %, BP in °C/mm, n<sup>20</sup>D, BP of IV in °C/mm, n<sup>20</sup>D : C<sub>2</sub>H<sub>5</sub>, 24, 53, 140-142/0.5, 1.4546, 134.5/0.25, 1.4422; n-C<sub>3</sub>H<sub>7</sub>, 48, 50, 145-147/0.5 (MP 49-50°), - , 139/0.25, 1.4423; n-C<sub>4</sub>H<sub>9</sub>, 64, 30, 147-148/0.25, 1.4547, 139-140/0.2, 1.4433. To boiling solution of 0.1 mole I and RI in 20 ml absolute alcohol added dropwise a solution of 0.2 g-atom Na in 80 ml absolute alcohol maintaining pH of the solution &lt; 8.5. After addition of all NaOC<sub>2</sub>H<sub>5</sub>, the mixture is boiled for 30 minutes, alcohol is driven off, residue diluted with water and II extracted with ether. Listing R, amount of Card: 3/4</p>		

6-4

CZECHOSLOVAKIA

JARY, J; HERMANKOVA, V; KOVAR, J.

Mono-Saccharide Laboratory, Technical College of Chemistry,  
(Laboratorium für Monosaccharide, Technische Hochschule  
für Chemie), Prague - (for all)

Prague, Collection of Czechoslovak Chemical Communications,  
No 5, May 1966, pp 2048-2058

"Aminosugar. Part 8: Preparation of derivatives of  
3,6-diamino-3,6-didesoxy-D-allose."

HERMANN, A., dr.

Dry and non-contact control of insulation, Elektrotechnik 17  
no.5:144 My '62.

HERMANN, A., dr.

Cleaning insulators by interrupted water stream. Elektrotechnik  
18 no.1:16 Ja '63.

HERMANN, A., dr.

Electric system for transport airplanes. Elektrotechnik 18 no.5:  
138-139 My '63.

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618010016-8

HERMANN, Adolf, dr.

Air cushion railway cars. Zel dop tech 10 no.4:126-127  
'62.

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618010016-8"

HERMANN, Arthur, okl. villamosmernok

Some problems related to the designing of mild-iron instruments.  
Meres automat 8 no.7:203-209 '60.

1. EKM műszaki fejlesztési osztály.

HERMANN, A.

Welding of aluminum cables with Thermit cases, p. 380, ZVARANIE  
(Ministerstvo hutneho prumyslu a rudnych bani a Ministerstvo strojarstvo)  
Baratislava, Vol. 3, No. 12, Dec. 1954

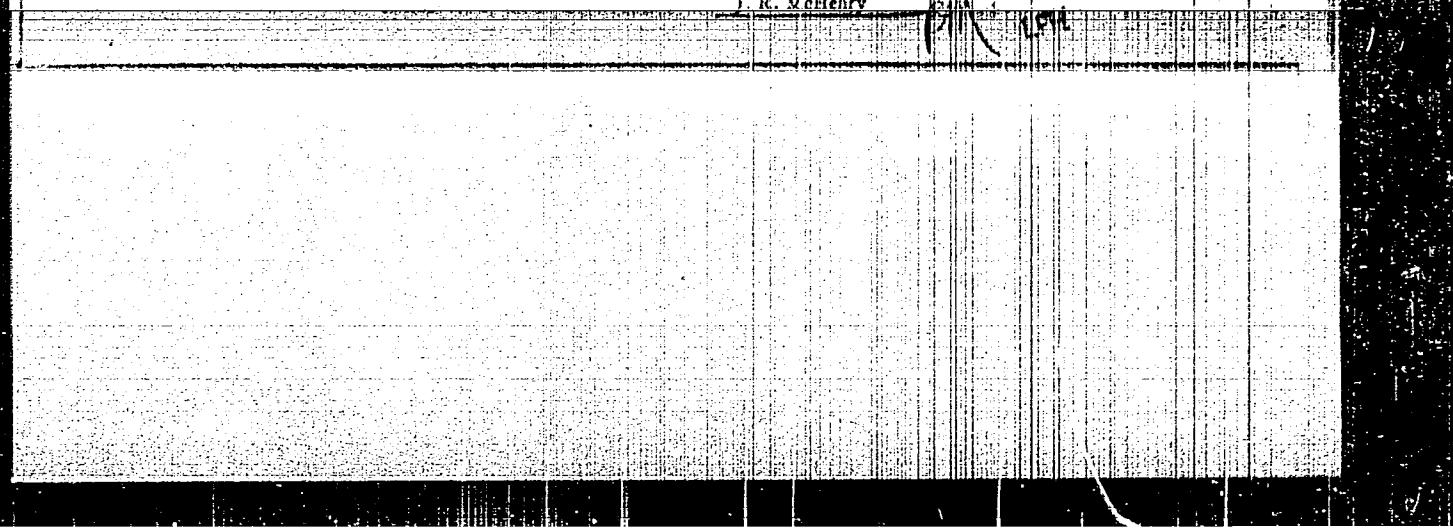
SOURCE: East European Accessions List (EEAL) Library of Congress,  
Vol. 4, No. 12, December 1955

Hermann, Anastazja

The benzidine reaction of platinum metals. Alfons Krause and Anastazja Hermann (UNIV. Poznan, Poland). Bull. Soc. Chim. Belges Lettres Poznan Ser. B, 13, 147-54 (1958) (in German). — The benzidine color is developed in the presence of dil (<0.1N) AcOH and 0.6% H<sub>2</sub>O<sub>2</sub> as a function of the Pt activity. The reaction is a reversible reduction-oxidation type. Small amounts of HgCl<sub>2</sub> (0.75 γ), KCN (3.25 γ), Na<sub>2</sub>S (18 γ), As<sub>2</sub>O<sub>3</sub> (17 γ), and NaF (8.4 mg.) per 0.1 ml. are sufficient to poison the reaction in 0.006N AcOH. The reaction is more readily poisoned when the AcOH is added prior to the H<sub>2</sub>O<sub>2</sub>. Hydrates and hy-

chloride

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000618010016-8



APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000618010016-8"

Hermann Kriegel

Distr: bE2c

✓ The catalytic properties of metallic silver and its poisoning. Alfons Krause and Anastazja Hermann-Kriegel (Univ. Poznan, Poland). Rocznik Chemii 32, 911-3 (1958) (German summary). — The catalytic activity of Ag in  $H_2O_2$  decomprn. at 37° increases if the same piece is again immersed in fresh  $H_2O_2$  soln. This is probably due to formation of colloidal Ag with intermediate formation of  $Ag_2O$  or Ag peroxide. The corrosion of Ag is accelerated by HCOOH. The action of Ag in the benzidine reaction is strongly poisoned by traces of  $As_2O_3$ , NaCN,  $HgCl_2$ , or  $NiF_2$ . Ag acts as an inhibitor in the indigocarmine decoloration, contrary to other noble metals.

27

5

1

CATEGORY : By the author's own statement, the article  
is not classified by the author.

ART. NO.R. : 1059, No. 17, 1959, No. 10734

NAME : Tsvetkov, N. M., Institute of Catalysis.

INSTITUTE : -

TITLE : Increase of catalytic activity of certain noble  
metals by means of scratching their surface

ORIG. PUB. : Sovzna. zhurn., 1959, No. 2, 1073-1081

ABSTRACT : It has been established that the result of  
scratching surfaces of Pt and Pd their cata-  
lytic activities are increased in the limits  
of specific temperatures. The scratching of  
the solid Au catalyst is not effective.

Card:

1/1

B-14

ANASTAZIA HERMANN

27  
Properties of tantalum in oxidation-reduction systems.  
Alfons Krause and Anastazia Hermann (Univ. Poznań,  
Poland). Rocznik Chemii, 35, 225-240 (1961) (German sum-  
mary).—Metallic Ta is unable to transfer O in the HCO-  
OH-H<sub>2</sub>O<sub>2</sub> or the indigocarmine-H<sub>2</sub>O<sub>2</sub> system. Ta acts as an  
inhibitor in H<sub>2</sub>O<sub>2</sub> decompr., especially at higher temps.  
(70°), where the reaction is of the 1st order. Ta oxidized  
in air to Ta<sub>2</sub>O<sub>5</sub> behaves indifferently. Ta<sub>2</sub>O<sub>5</sub> is not formed  
by action of H<sub>2</sub>O<sub>2</sub> (on Ta), which shows in this case reducing  
properties.

4  
GE 26  
G.W.C.

HERMANN, A.

Distr: 4E2c

Catalytic properties of metallic gold and its poisoning. Alfons Krause and Anastazja Hermann (Univ. Poznan, Poland). Roczniki Chem. 33, 515-17 (1959) / (German summary).--The catalytic activity of 2 Au foils, contg. 0.1% and 1.5% Cu + Ag, was examd. No activity was observed in the HCOOH oxidn.; a weak 1 was observed in the H<sub>2</sub>O<sub>2</sub> decompn. The activity of foil contg. 0.1% Cu + Ag was always stronger than of the foil contg. 1.5%, both increasing with temp. The H<sub>2</sub>O<sub>2</sub> decompn. is a 1st order reaction with the rate consts. at 60° equal to  $0.9 \times 10^{-3}$  (0.1% foil) and  $1.35 \times 10^{-3}$  (1.5% foil). The action of Au on the indigo carmine decoloration is stronger than of Pt or Pd. No benzidine reaction was observed on the surface of either foil. Hence, their activity cannot be explained as due to the presence of Cu alone. Au is rather a specific catalyst. Both foils were strongly poisoned by As<sub>2</sub>O<sub>3</sub> or H<sub>2</sub>S, whereas NaCN showed activating properties. A. Kreglewski

(Retyped clipped abstract)

Card 1/1

mk

4  
rgaj(ne)

57  
JF

✓ Metallic platinum as the inhibitor of the peroxidative  
indigo carmine decoloration. Alfons Krause and Anastazja  
Hermann (Univ. Poznań, Poland). *Roczniki Chem.* 33,  
637-9 (1959) (German summary).—It was stated that  
ordinary Pt foil (with lattice imperfections) inhibits the  
reaction in the indigo carmine (I)-H<sub>2</sub>O<sub>2</sub> system at 37, 50,  
and 60°, owing to lack of sorption of I on Pt and to catalytic  
decompn. of H<sub>2</sub>O<sub>2</sub>. The effect vanishes at 70°. Polished  
Pt behaves indifferently, whereas colloidal or Pt-black  
accelerates the reaction between I and H<sub>2</sub>O<sub>2</sub>. A.K.  
*H. A. C.*

HERMANN, A.

✓ Catalytic properties of metallic palladium and its poisoning. Alfons Krause and Anastazja Hermann (Univ. Poznan, Poland). *Z. anorg. u. allgem. Chem.* 299, 153-7 (1959).—The catalytic effect of Pd foil at 37°, 50°, and 70° on the decompr. of  $H_2O_2$  and on the  $H_2O_2$  oxidation of  $HCO_3H$ , at 37° and 70° on the  $H_2O_2$  oxidation of *indigo carmine*, and at room temp. on the  $H_2O_2$  oxidation of benzidine is studied. Pd is more effective than Pt; etched foil is superior to polished foil. Pd is poisoned by NaCN, Na<sub>2</sub>S, As<sub>2</sub>O<sub>3</sub>, HgCl<sub>2</sub>, or PdO<sub>2</sub>. The decompr. of  $H_2O_2$  and the oxidation of  $HCO_3H$  are 1st order; Pd lowers the activation energy of the former reaction by 1-2 kcal. R. J. J.

4  
4E2c

HERMAN, B.

Pathophysiology of thyroid diseases and their therapy. Prakt.  
lek., Praha 31 no. 9:194-198 5 May 1951. (CML 22:3)

1. Of the Central Institute of Endocrinology (Head--Docent K.  
Silink, M. D.) and of the Clinic of Internal Diseases (Head--Prof.  
J. Blatny, M. D.) of Palacky University.

HERMAN F.; VYKYDAL, M.

Implantation of the hypophysis in the treatment of rheumatism.  
Prakt. lek., Praha 31 no. 23:517 5 Dec. 1951. (CML 21:3)

*HERMAN, B.*

HERMAN, B.; VYKYDAL, M.

Pituitary implantation in rheumatism. Cas. lek. cesk. 90  
no.27:829-831 6 July 1951. (CML 21:1)

1. Of the Clinic of Internal Diseases of Palacky University in  
Olomouc (Head — Prof. Josef Blatny, M.D.).

HERMANN, B.

Congenitalis familiaris methaemoglobinæmia. Orv. hetil. 94 no.22:607-  
610 31 May 1953. (CIML 25:1)

1. Doctor. 2. Internal Department (Head Physician -- Dr. Bela Hermann).  
Gyulai County Hospital.

HERMANN, J.

GERGELY, Rezsö, dr.; HERMANN, Bela, dr.

Secondary suture of the wound. Magy. sebeszet 7 no. 4:254-262  
Aug 54.

(WOUNDS AND INJURIES, surg.  
suture, secondary)

HERMANN, Bela, dr.

Irritability of the autonomic nervous system in peptic ulcer.  
Orv. hetil. 95 no.42:1147-1150 17 Oct 54.

1. A Gyulai Megyei Korhas Belgyogyasszati Osztalyanak (foorvos:  
Hermann Bela dr.) kozlemenye.

(PEPTIC ULCER, physiol.

autonomic nerv. system, irritability)

(AUTONOMIC NERVOUS SYSTEM, in various dis.

peptic ulcer, irritability)

HERMANN, Bela, dr.; IZSAK, Tibor, dr.; SZENTESZKY, Ilona, dr.;  
BENCZE, Gyula, dr.; RISKO, Rezso, dr.

Determination of vital capacity in bronchial asthma between  
seizures and in diseases of the cardiovascular and respiratory  
systems following application of atropine. Orv. hetil. 96 no.  
18:492-494 1 May 55.

1. A Gyulai Megyei Korhaz Belgyogyaszati Osztalyanak (foorvos:  
Hermann, Bela dr.) kozlemenye.

(RESPIRATION,  
vital capacity in asthma & cardiovascular & resp.

dis., eff. of atropine.)

(ASTHMA, physiology,

vital capacity, eff. of atropine.)

(CARDIOVASCULAR DISEASES, physiology,

vital capacity, eff. of atropine.)

(RESPIRATORY TRACT, diseases,

vital capacity in, eff. of atropine.)

(ATROPINE, effects,

on vital capacity in asthma & cardiovascular & resp.  
dis.)

*HELMANN, Bela*

BELA, Hermann, dr.; FROHLICH, Otto, dr.

Data on caseous tuberculosis of the thyroid glands. Tuberk.  
kerdesei 9 no.1:27-28 Feb 56

1. A gyulai Megyei Korhar Beleggyosszati (foorvos: Hermann Bela dr.)  
es Sebeszeti Osztalyanak (foorvos: Frohlich Otto dr.) koslemenye.

(THYROID GLAND, dis.  
tuberc., caseous, surg. & pathol. (Hun))

(TUBERCULOSIS  
of thyroids, caseous, surg. & pathol.(Hun))

HERMANN, B.

Significance of studies on autonomic nervous system function  
in ulcers and hypertension. Acta med. hung. 10 no.1-2:111-  
119 1956.

1. Abteilung fur innere Krankheiten des Komitatskrankenhauses,  
Gyula.

(PEPTIC ULCER, physiol.  
autonomic NS funct., tonus & irritability (Ger))

(HYPERTENSION, physiol.  
same)

(AUTONOMIC NERVOUS SYSTEM, in various dis.  
hypertension & peptic ulcer, tonus & irritability (Ger))

HERMANOVA, K.; HERMAN, B.; TESAREK, B.

Influence of dietary therapy on arterial hypertension in Dolni Lipova. Ces.lek.cesk. 95 no.33-34:908-912 24 Aug 56.

1. I interni klin. MU v Olomouci, predn. prof. Luká, Statni lazne Dolni Lipova. B.H., Pardubice, KUNZ  
(HYPERTENSION, ther.  
salt-free diet (Cx))  
(DIETS, in various dis.  
hypertension, salt-free diet (Cx))

HERRMAN, B.; KUCKRA, J.; JANICEK, M.

Clinical picture of pheochromocytoma and its treatment. Ces.lek.  
cesk. 95 no.33-34:929-933 24 Aug 56.

1. I. interni klin. PU v Olomouci. Predn. prof. MUDr P.Lukl.  
Chirur. klin. PU v Olomouci. Predn. prof. MUDr J.Rapant. B.H..  
Pardubice, KUNZ  
(PHEOCHROMOCYTOMA, case reports  
diag. & surg.(Cx))

HERMANN, Bela, dr.,; IZSAK, Tibor, dr.,; BENCZE, Gyula, dr.

Functional study on the autonomic nervous system in hypertension.  
Orv. hetil. 97 no.6:150-153 5 Feb 56.

1. A Gyulai Megye Korhas Belgyogyaszati Osztalyanak (főorvos:  
Hermann Bela dr.) közl.

(HYPERTENSION, physiol.

autonomic NS, determ. of tonus by eff. of chem.  
stimulation on blood pressure (Hun))

(AUTONOMIC NERVOUS SYSTEM, in various dis.

hypertension, determ. of tonus by eff. of chem. stimulation  
on blood pressure (Hun))

(BLOOD PRESSURE, in various dis.

hypertension, eff. of chem. stimulation of autonomic  
NS in determ. of nerv. tonus (Hun))

HERMANN, Bela, dr.; FROHLICH, Otto, dr.

Recovery after surgery in hydropericardium lasting for decades  
and simulating tumor. Magy. sebeszet 10 no.1:55-59 Mar 57.

1. A Gyulai Megyei Korkhas Belgyogyaszati (Foorvos: Hermann, Bela  
dr.) es Sebeszeti Osztalyanak (Foorvos: Frolich, Otto, dr.)  
kozleménye.

(PERICARDIUM, dis.  
hydropericardium simulating tumor & lasting for  
decades, diag. & surg. (Hun))

*HERMANN, BELA*

TYCERINTA : MDICA Sec 6 Vol 13/10 Internal Med Oct 50

6055. THE FUNCTIONAL TEST OF THE AUTONOMIC NERVOUS SYSTEM IN  
ULCER DISEASE AND HYPERTENSION - A vegetatív idegrendszer funk-  
cionális vizsgálatának jelentősége az ulcer és a hypertonia betegségeben -  
Hermann B. Gyulai Megyei Kórház Belgyógyászati Osztályáról, Gyula -

MAG. BELORV. ARCH. 1957, 10/2-3 (82-87) Tables 3

The tone or the degree of irritability of the autonomic nervous system in the active and quiescent stages of ulcer disease and in the functional stage of hypertensive disease was determined. In ulcer patients a true (i. v.) adrenaline sensitivity before and after administration of atropine was established, and in hypertensive patients also after phenobarbital and hydergin. In the active stage of ulcer disease the tonus of the sympathetic and of the parasympathetic system was increased, and in the quiescent stage they were both decreased. In the intermediate stage between

activity and quiescence the entire ANS showed an average tone. In the functional stage of hypertensive disease the tone of the parasympathetic system is always decreased while during phases of maximal hypertension it is higher than normal. The tone of the sympathetic system varies: in maximal hypertension it is reduced. It would appear that from the results of the adrenaline-atropine test, the activity of the ulcer disease can be assessed, while in hypertension it is possible to state whether the patient is in the stage of his individual-maximal hypertension or in a stage of a relatively low blood pressure. With regard to the treatment of hypertensive disease, attention is drawn to the possibility of differentiated use of sedatives and of sympathicolytic and parasympathicolytic as well as peripheral spasmodalytics acting on the smooth musculature.

HERMANN, Bela, Dr.

DDT poisoning in men; severe polyneuritis caused by DDT. Orv. hetil.  
98 no.43:1191-1194 27 Oct 57.

1. A Gyulai Megyei Korhaz Belgyogyaszati Osztalyanak (foorvos: Hermann  
Bela dr.) kozlemenye.

(DDT, pois.  
in hosp. employee working with disinfectants causing  
severe polyneuritis (Hun))

(POLYNEURITIS, etiol. & pathogen.  
DDT in hosp. employee working with disinfectants, severe  
case (Hun))

SZENDI, BALAZD; HERMANN, BELA; HEIM, VILMOS

Shock and fatal abdominal hemorrhage caused by uterine torsion in the 6th month of pregnancy. Orv. hetil. 98 no.45:1249-1251 10 Nov 57.

1. A Gyulai Megyei Korhaz Sztilo-Nobeteg Osztalyanak (foorvos: Szendi Balazs dr., az orvostudomanyek kandidatusa) Belosztalyanak (foorvos: Hermann Bela dr.) es Korbontani Intezetenek (foorvos: Heim Vilmos dr.) kozleménye.

(PREGNANCY, compl.

uterine torsion with shock & fatal abdom. hemorrh. in  
6th month (Hun))

(UTERUS, dis.

torsion with shock & fatal abdom. hemorrh. in 6th  
month of pregn. (Hun))

(ABDOMEN, hemorrh.

fatal hemorrh. caused by uterine torsion in 6th month  
of pregn. (Hun))

HERMANN, Bela, Dr.; CSEPPENTO, Ilona, Dr.; IZSAK, Tibor, Dr.

Relation of spondylosis deformans to some vegetative diseases. Magy.  
belorv. arch. 11 no.1:1-3 Feb 58.

1. A Gyulai Megyei Korhaz Belgyogyaszati Osztalyarol. (Főorvos: Hermann,  
Bela dr.)

(SPONDYLOSIS, compl.  
autonomic NS dis. in spondylosis deformans (Hun))  
(AUTONOMIC NERVOUS SYSTEM, dis.  
in spondylosis deformans (Hun))

EXERPTA MEDICA Sec 6 Vol 13/2 Internal Med. Aug 52

4279. REFLEX ERYTHEMA STUDIES IN CORONARY DISEASE - Hermann B.,  
Cséppenő I. and Izsák T. Dept. of Med., County Hosp., Gyula -  
ACTA MED. ACAD. SCI. HUNG. 1958, 11/2 (195-202) Tables 3

0.1 ml. of acetylcholine 2% with 0.1 ml. of prostigmine 0.5% was injected intra-dermally into the 2nd costal interspace in the medio-clavicular line, on both sides. The area of the erythema thus obtained was measured and compared. In normal human subjects this area is the same on both sides. In 79 patients with coronary disease, the erythema was remarkably larger on the left side. In one patient with a posterior wall infarction and 8 patients with gallbladder disorders, the erythema was larger on the right side. One day later the experiment was repeated, after 2 ampoules of dihydrogenated ergotoxin ('hydergin') had been injected i.m. 2 hr. previously. In normal persons, this adreno-sympathicolytic agent has no influence on the size of the acetylcholine-prostigmine erythema. In 68 patients with coronary insufficiency, however, the artificial erythema diminished greatly on both sides, although the left side remained larger than the right. In 32 patients with a serious heart disease, 'hydergin' had no effect on this. Some of these patients with serious coronary disorders also suffered from gallbladder disorders. In 64 patients with coronary insufficiency, the vital lung capacity proved to increase from 0.2 to 0.7 l. 8 to 10 minutes after an atropine injection. Here, a bronchial spasm must have been relieved, which existed in the superior thoracic segments of the bronchial tube, as an expression of the presence of a Head zone in the lungs.

Hoekstra - Leeuwarden (XVII, 6)

HERMANN, B.; CZEPPENTO, I.; IZSAK, T.

On the aetio-pathomechanism of spondylosis deformans. Acta med. hung.  
11 no.2:217-225 1958.

1. Department of Internal Medicine, County Hospital, Gyula  
(SPONDYLOSIS, etiol. & pathogen.  
spondylosis deformans)

HERMANN, B.

DDT poisoning in man; a case of grave polyneuritis caused by DDT.  
Acta med. hung. 11 no.2:209-215 1958.

1. Department of Medicine, County Hospital, Gyula.  
(DDT, pois.  
polyneuritis in hosp. disinfectant)  
(POLYNEURITIS, etiol. & pathogen.  
DDT pois. in hosp. disinfectant)

HERMANN, Bela, Dr.; CSEPPENTO, Ilona, Dr.; IZSAK, Tibor, Dr.

Examination of reflex erythema in coronary disease. Orv. hetil.  
99 no.1:22-25 5 Jan 58.

1. A Gyulai Megyei Korhaz Belgyogyaszati Osztalyanak (foorvos: Hermann  
Bela dr.) kozleménye.

(CORONARY DISEASE, diag.

reflex erythema after intracutaneous acetylcholine-  
neostigmine inject. (Hun))

(ERYTHEMA

reflex erythema after intracutaneous acetylcholine-  
neostigmine inject. in diag. of coronary dis. (Hun))

(REFLEX

same)

HERMANN, Bela, Dr.

Current problems of antibiotic therapy. Orv. hetil. 99 no.20:674-680  
18 May 58.

1. A Gyula Megyei Korhaz Belgyogyaszati Osztalyanak (foorvoa: Hermann  
Bela dr.) kozlemenye.  
(ANTIBIOTICS, ther. use  
current problems (Hun))

HERMANN, Bela, Dr.; CSIPPENTO, Ilona, Dr.

Hemorrhagic diathesis caused by hypoprothrombinemia in liver cirrhosis.  
Orv. hetil. 99 no.46:1618-1620 16 Nov 58.

1. A Gyulai Megyei Korhaz Belgyogyaszati Osztalyanak (foorvos: Hermann  
Bela dr.) kozlemenye.

(LIVER CIRRHOSIS, compl.  
hypoprothrombinemia & hemorrhagic diathesis, case report  
(Hun))

(PROTHROMBIN, defic.  
in liver cirrhosis causing hemorrhagic diathesis, case  
report (Hun))

(HEMORRHAGIC DIATHESIS, etiol. & pathogen.  
liver cirrhosis & hypoprothrombinemia, case report (Hun))